



State of Vermont

Agency of Human Services
Department of Mental Health and Mental Retardation
103 South Main Street
Waterbury, Vermont 05671-1601

MEMORANDUM

TO: Vermont Adult Performance Indicator Advisory Group

FROM: John Pandiani
Andrew Zovistoski
Lisa Gauvin

DATE: March 19, 1997

RE: Residential Situation

We have enclosed a number of materials that present information on the living situation of adult clients of community mental health programs. These materials include:

1. A two page summary that reports the results of three analyses of the data;
2. Four tables that provide a more detailed breakdown; and
3. An article from *The Journal of Mental Health Administration* which includes more detailed interpretations.

Please keep in mind that all of the analyses we are sharing with you should be regarded as first drafts. The original plan for the Performance Indicator Project calls for two or three review rounds of every indicator before we make a recommendation to the Commissioner.

LIVING SITUATION of Clients of Community Mental Health Programs

QUESTION:

How many clients of community mental health programs live in residences they own or rent? (This question is related to a concern that people live in residential situations that are independent of formal service systems.)

DATA:

Information on residential situation is reported to DDMHS by all community mental health centers as part of their Quarterly Service Reports. CMHC contracts have required that this information be updated annually since 1994. Before information on residential situation was reported on a regular basis, periodic surveys of CRT case managers were conducted to obtain information on the living situation of clients of community programs.

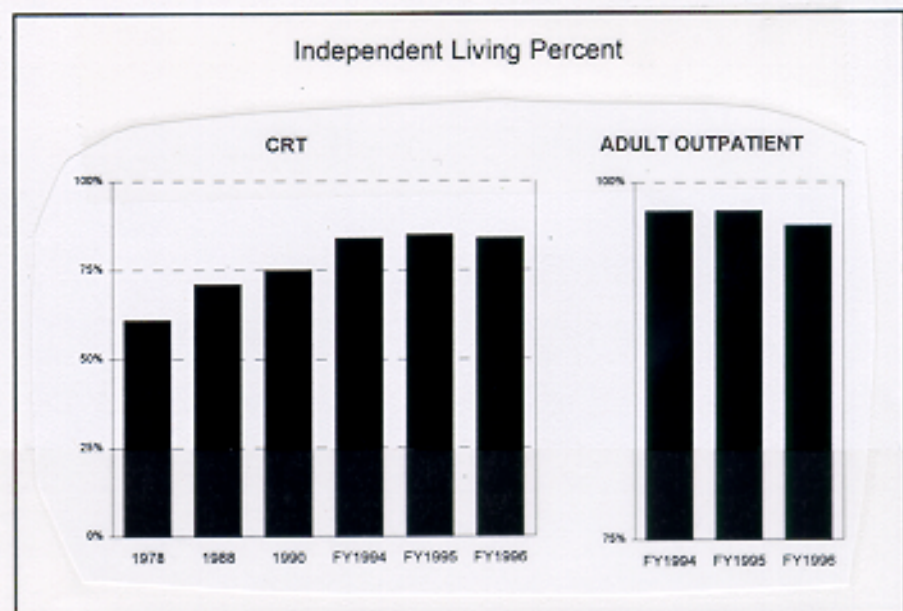
ANALYSIS:

The results of three different analyses of the residential situation of clients of CMHC mental health programs for adults are reported below. These include an historical overview of system change, a measure of the change in the living situation of individual clients, and a comparison of the living situation of clients of different community programs. For purposes of this analysis, 15 residential categories have been grouped into two broad categories ("Independent Living", which includes people who own or rent their own home/condo/trailer; and "Other" which includes people who live in care settings, such as group homes, community care homes, and nursing homes). The results of each of these analyses will be reported for both CRT and Adult Mental Health Outpatient programs.

The historical analysis presents data on the proportion of clients who were in independent living situations during each of 6 distinct time periods during 1978 through 1996. This analysis focuses on overall populations; it does not look at the movement of individual clients over time. The second analysis measures the amount of change in the living situation of individual clients by comparing the living situation reported for 1994 with the living situation reported for 1996. The third analysis compares the representation of clients who are in independent living situations for each of Vermont's 10 CMHCs.

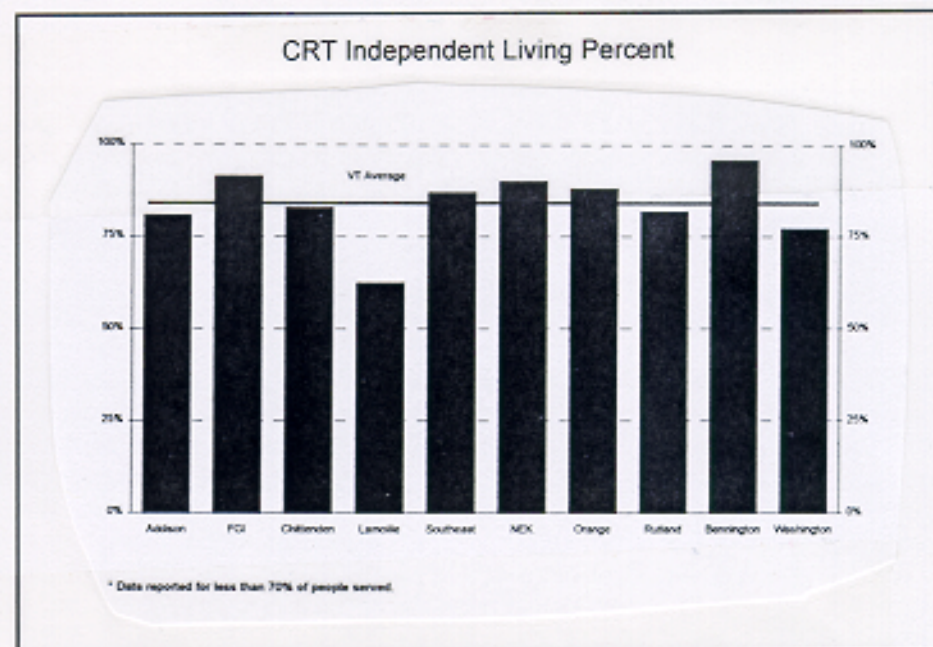
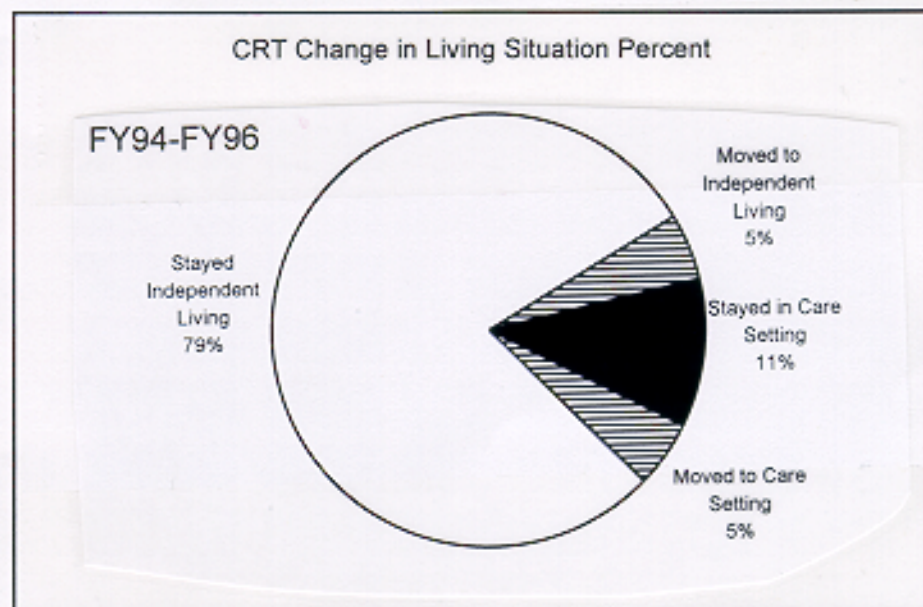
RESULTS:

Historically, there was a substantial increase in the proportion of CRT clients in independent living situations between 1978 (61%) and 1994 (84%). Since that time, the representation of people in independent living situations among CRT clients has remained at about 85%. Clients of Adult Mental Health Outpatient programs were much more likely to be living independently, (97% or 98% for each of the years for which data was available).



There was very little change in the living situation of individual clients of either the CRT or the Adult Mental Health Outpatient programs during the period for which data is available. Between 1994 and 1996, 5% of CRT clients moved from care settings to independent living and 5% moved from independent living to care settings; 90% of CRT clients remained in the same living situation category according to data submitted by Vermont's CMHCs. Between 1995 and 1996, 2% of CRT clients moved from independent living, 2% moved to independent living, while the living situation of 95% remained unchanged. There was almost no movement between independent living and care setting among clients of Adult Mental Health Outpatient programs.

There were substantial differences in the living situation of clients of different CRT programs in 1996. The proportion of the people served by CRT programs who were in independent living situations varied from 63% at Lamoille County Mental Health to 96% at United Counseling Service. There was almost no difference in the living situation of people served by Adult Mental Health Outpatient programs:



**Community Living Situation
of People Served by Adult Outpatient Programs
FY1994 - FY1996**

		FY1994	FY1995	FY1996
		<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Care Settings				
Community Care Homes	2%	2%	< 1%	3%
Group Homes	1%	< 1%	1%	1%
Nursing Homes	< 1%	< 1%	< 1%	< 1%
Other	1%	1%	1%	1%
Other	< 1%	1%	1%	1%
Independent Living				
Subsidized Rental	98%	98%	97%	
Rent/Own Unsubsidized	8%	7%	8%	
Rent/Own Unsubsidized	90%	91%	89%	
Care Settings				
Community Care Homes	85	116	196	
Group Homes	28	23	41	
Nursing Homes	11	13	20	
Other	27	32	100	
Other	19	28	35	
Independent Living				
Subsidized Rental	4,921	5,367	6,601	
Rent/Own Unsubsidized	417	369	524	
Rent/Own Unsubsidized	4,504	4,998	6,077	
Total	5,006	5,483	6,797	
Other/Unknown/Missing				
Number	2,510	1,997	1499	
Percent	33%	27%	18%	
Total Clients Served	7,516	7,480	8,296	

**Community Living Situation
of People Served by Community Rehabilitation and Treatment Programs
1978 - FY1996**

	Surveys of Case Managers			QSR Annual Updates		
	1978	1988	1990	FY1994	FY1995	FY1996
Care Settings	Percent	Percent	Percent	Percent	Percent	Percent
Community Care Homes	39%	29%	25%	16%	15%	16%
Group Homes	34%	22%	19%	10%	8%	10%
Nursing Homes	2%	3%	4%	2%	3%	2%
Other	3%	2%	1%	2%	2%	2%
Independent Living	61%	71%	75%	84%	85%	84%
Subsidized Rental		15%	26%	12%	17%	19%
Rent/Own Unsubsidized		36%	35%	72%	69%	65%
Family/friend		18%	13%			
Other		2%	2%			
Care Settings	Number	Number	Number	Number	Number	Number
Community Care Homes	618	490	450	229	306	455
Group Homes	538	365	339	135	175	277
Nursing Homes	36	57	65	34	53	70
Other	44	34	17	22	39	56
Independent Living	962	1182	1376	1,174	1,756	2,363
Subsidized Rental		256	469	163	342	522
Rent/Own Unsubsidized		602	641	1,011	1,414	1,841
Family/friend		295	232			
Other		29	34			
Total	1,580	1,672	1,826	1,403	2,062	2,818
Other/Unknown/Missing						
Number				1,739	1,121	483
Percent				55%	35%	15%
Total Clients Served				3,142	3,183	3,301

**Change in Community Living Situation
of People Served by Community Rehabilitation and Treatment and Adult Outpatient Programs
FY1994 - FY1996 and FY1995 - FY1996**

CRT				Adult Outpatient					
		<u>FY94 - FY96</u>	<u>FY95 - FY96</u>			<u>FY94 - FY96</u>	<u>FY95 - FY96</u>		
Total Served During Both Years		2,357	2,674			2,032	3,346		
Living Situation									
Total with Data For Both Years		#	%	#	%	#	%		
		957	41%	1,691	63%	1,233	61%	2,429	73%
Changed									
Independent Living to Care Setting		44	5%	41	2%	8	1%	9	<1%
Care Setting to Independent Living		46	5%	40	2%	6	<1%	7	<1%
Unchanged									
Independent Living		759	79%	1,384	82%	1,207	98%	2,392	98%
Care Setting		108	11%	226	13%	12	1%	21	1%

Community Living Situation of People Served by Community Rehabilitation and Treatment and Adult Outpatient Programs FY1996 by Region

Community Rehabilitation and Treatment Clients

	Clients Served		Total with Living Arrangement Data		Living Independently		Care Settings	
	#	%	#	%	#	%	#	%
Addison	146		130	89%	105	81%	25	19%
FGI	210		175	83%	160	91%	15	9%
Chittenden	673		563	84%	467	83%	96	17%
Lamoille	133		128	96%	80	63%	48	38%
Southeast	402		360	90%	313	87%	47	13%
NEK	455		359	79%	323	90%	36	10%
Orange	114		109	96%	96	88%	13	12%
Rutland	316		271	86%	222	82%	49	18%
Bennington	225		199	88%	191	96%	8	4%
Washington	627		518	83%	400	77%	118	23%
Total	3,301		2,812	85%	2,357	84%	455	16%

Adult Outpatient Clients

	Clients Served		Total with Living Arrangement Data		Living Independently		Care Settings	
	#	%	#	%	#	%	#	%
Addison	588		482	82%	477	99%	5	1%
FGI	807		708	88%	698	99%	10	1%
Chittenden	1,888		1,372	73%	1,339	98%	33	2%
Lamoille	216		191	88%	191	100%	0	--
Southeast	1,581		1,411	89%	1,374	97%	37	3%
NEK	785		672	86%	661	98%	11	2%
Orange	259		237	92%	233	98%	4	2%
Rutland	799		617	77%	587	95%	30	5%
Bennington	635		464	73%	405	87%	59	13%
Washington	738		643	87%	636	99%	7	1%
Total	8,296		6,797	82%	6,601	97%	196	3%

* Data reported for less than 70% of people served.

Data is based on Quarterly Service Reports provided by Vermont's community service providers.

Impact of Changing Public Policy on Community Mental Health Client Residential Patterns and Staff Attitudes

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John E. Pierce, M.Ed.

Abstract

Three studies of perceived residential needs and community residential patterns of adults with severe and persistent mental illness over a period of 12 years are used to assess the effect of changing public policy in this area. During a period in which public policy shifted from advocacy of congregate living in treatment settings to independent living in generic community housing, there were significant changes in community residential patterns and in the attitudes of case managers. Clinical and demographic data collected in the most recent survey provides a much more complete profile of the community living situation of adults with severe and persistent mental illness than was previously available.

Successful implementation of a significant change in public policy involves two distinct but related processes that are rarely evaluated independently. While we frequently measure the degree to which a policy is actually implemented, we rarely measure the degree to which staff members understand and agree with the policy direction. We believe staff members' support for public policy is a critical factor in the initial success of the policy and the success of efforts to continue to move in the desired direction. Staff resistance can subvert even the most promising changes in public policy. Staff support can contribute to success where the outcome would otherwise be questionable.

In this article, we will discuss a significant change in social policy regarding community housing for adults with severe and persistent mental illness promoted by the Division of Mental Health (DMH) of the Vermont Department of Mental Health and Mental Retardation and other leaders in the Vermont mental health system over the past 15 years. This period has spanned two distinct deinstitutionalization efforts that saw the census of the Vermont State Hospital reduced from more than 350 patients in 1978 to less than 100 patients in 1993. During this period, DMH policy changed from advocacy of care settings (especially group homes and community care homes) to increasing advocacy of independent living as the most appropriate option for most adults with severe and persistent mental illness.

The success of this policy change will be evaluated on the basis of surveys of community mental health center case managers that collected information on the housing situation and needs of all clients being served in the community in 1978, 1988, and 1990. The surveys collected both objective

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data on clients' living situations and data on case managers' subjective opinion as to the most effective way to implement the program. The study will also examine the direction and rate of change of each of these two important aspects of social policy implementation.

Policy Environment

During the mid- to late 1970s and early 1980s, the State of Vermont was committed to the development of a system of community board and care homes and group treatment homes and staffed apartments as an alternative to institutionalization for adults with severe and persistent mental illness.¹⁻³ This favored initial phases of deinstitutionalization that had relied heavily on community care homes funded primarily by clients' supplemental security income (SSI) payments. Between 1975 and 1980, a system of 11 group residential treatment programs were developed and 8 more were planned. In the early to mid 1980s, the group home model was supplemented by financial support for staffed apartments for hard-to-place patients who were discharged from the Vermont State Hospital. These efforts to create a comprehensive system of supervised residences met with only limited success. Group homes took a long time to develop. Both group homes and staffed apartments were expensive to run, they served a very small proportion of the client population, and community opposition to facility-based residential treatment was a persistent barrier.

At the same time, as community residences were the major focus of investment, the ideological seeds of an alternative model of treatment were being sown by consultants from the Center for Psychiatric Rehabilitation at Boston University. The psychiatric rehabilitation approach countered traditional residential care philosophy by stressing independent functioning in a variety of community settings with a strong emphasis on client choice. In the second half of the 1980s, the rehabilitation approach being promoted by the DMH and supported by a growing consumer and family movement culminated in an application to the Robert Wood Johnson Foundation that called for reducing the State Hospital Census from 200 to 80 and transferring funds from hospital to community programs. The Robert Wood Johnson application was funded in 1987, and aggressive program development began in supported community housing and case management. Based on the "strengths model"⁴ of case management and the "supported housing" model promoted by DMH, housing policy was evolving in the context of a larger systems' paradigm shift away from a treatment continuum model toward an integrated, individualized, flexible and client-centered approach.⁵ During the late 1980s, this system change was being complemented by a DMH-sponsored colloquium series at the University of Vermont that featured nationally known speakers on such topics as rehabilitation, community integration, and supported housing.⁶

In addition, newly organized housing coordinators at both the state department and the local provider levels were developing working relationships with public housing authorities and actively advocating the expanded use of federally subsidized housing certificates (Section 8) to enable adults with severe and persistent mental illness to afford apartments in the general housing market. In 1989, a housing contingency fund was instituted statewide by DMH to provide assistance to clients in establishing and maintaining normal community housing.

Finally, in 1990, the Vermont DMH adopted a housing policy that explicitly favored housing adults with severe and persistent mental illness in homes and apartments that are integrated with and available to the general public. Under this policy, the division's mission is, "to help people with psychiatric disabilities to choose, find, and maintain safe, affordable and permanent housing with the supports necessary for stability and maximum independence" (p. 1).⁷ This policy specifies "individual housing in a generic community environment that is not inherently a treatment or service setting" (p. 1) as the preferred model. No new group home capacity had been added for six years, and DMH has increasingly focused its energy on developing low-income housing opportunities for its clients and for other Vermonters.

In summary, the period between the mid 1970s and the early 1990s saw a significant change in Vermont DMH policy regarding community housing for adults with psychiatric disabilities. The 1970s ended with a strong commitment to the development of facility-based treatment settings as

adults with mental illness was seen as largely independent of psychiatric treatment and direct supervision by mental health professionals.

It is important to note that this state-level policy change was not developed in isolation and mandated by fiat. Instead, it was a policy that developed over time with extensive discussion and attitude shaping. Changes in funding policy followed rather than preceded discussion, and formal enunciation of the policy came last. This policy of change explicitly embraced a model in which staff members attitudes were seen as a leading, progressive force in policy change and implementation.

In the paragraphs that follow, we will report on the results of our evaluation of the impact of this shift in housing policy. The evaluation is based on a conceptualization of system change that distinguishes between objective descriptions of system behavior (in this case, actual community housing situations) and the subjective evaluations of the individuals who work in the service system (in this case, mental health case managers' evaluations of the most appropriate living situation for clients).

Two hypotheses guided our analysis of the data. First, we hypothesized that the service system itself has changed in measurable ways and that this objective change, like the policy change, has involved movement away from more formal care settings and toward more normalized housing for adults with severe and persistent mental illness. Second, we hypothesized that community professionals' subjective evaluations of clients' housing needs would have changed away from favorable evaluations of formal care settings and toward favorable evaluations of more diversified independent community living.

Method

Three housing surveys were conducted by the Vermont DMH over the past 15 years. Originally intended as needs assessments and program planning tools, the surveys collected information on both the actual housing situation of all clients and the case managers' subjective evaluations of the most appropriate housing situation for each of these clients. The first survey was conducted in 1978 under the public policy that favored care settings with live-in staff members, especially in group homes, for adults with severe and persistent mental illness. Subsequent surveys were conducted in 1988 and 1990 after the shift to a social policy that favors independent living in integrated community settings with flexible supports. We will use case managers' descriptions of the current living situation of their clients from each survey as our objective measure of the clients' residential situations. We will use the case manager's description of the most appropriate living situation for each client as our measure of the case manager's subjective evaluation of clients' housing needs. The three surveys reflect increasing methodological sophistication over time and point the way toward routine monitoring of community housing situations that will become one of the key indicators of the success of this social policy in the years to come.

In 1978, the Vermont DMH requested that each community mental health center poll its case managers to determine the current and the most appropriate housing situation for each client of the program. This survey was intended to help determine and project the community housing needs of recently discharged and soon-to-be discharged patients of the Vermont State Hospital. The survey instrument was designed by the department's planning division and reflected attitudes toward community housing for mental health clients that were prevalent at the time. Seven housing alternatives were offered by the questionnaire. Six of the seven can be classified as care settings. Community program directors were asked to report the aggregate number of clients currently living in each situation and the number of clients for whom each option would be the optimum housing alternative.

Ten years later, in 1988, the DMH conducted a second survey of the community housing situation and housing needs of adults with severe and persistent mental illness. Once again, the division asked community service providers for aggregate breakdowns of clients' current and most appropriate

living with family or friends were offered, and 5 rental situations were listed.

This change in the categories used to describe housing options is a clear and compelling example of how social conditions determine data availability as observed by Lieberman.⁸ The newer, broader set of housing categories presented to case managers not only reflected changing social and cultural conditions, it may also have had an effect on how people respond to the questions. Any change in response patterns must be interpreted in light of this change in instrumentation and the change in the overall ideological climate. The new ideological climate that is further evidenced by the fact that independent surveys of housing needs as perceived by clients and family members were also being conducted in Vermont in 1988.⁹

In 1990, the DMH conducted a much more detailed housing census. This survey was prompted by the need for more up-to-date and more detailed information on the housing situation and needs of adults with severe and persistent mental illness. More current information would help determine if any change in community housing patterns was occurring and allow for more effective lobbying with public and private sector housing development people. Rather than simply collecting aggregate housing information, all community rehabilitation and treatment case managers were asked to provide 12 bits of information regarding every client on their caseloads. In addition to data on clients' current and recommended housing situations, data on basic demographic, clinical, and service characteristics, as well as housing-specific concerns were collected.

More detailed client level data was collected because the previous surveys had raised numerous questions that could not be answered by the aggregate data. Very simple questions about the housing situation of clients in the various age, gender, and diagnostic groups, for instance, could not be answered by the aggregate data. Information on the income and substance abuse patterns of people in the various housing situations, factors that are very important for getting and keeping housing, was not available. The relationship between housing situation and the likelihood of rehospitalization could not be explored. Finally, aggregate data would not allow for assessment of the amount of concurrence between recommended and actual living situations. The fact that these questions were raised by local program directors as well as by state-level administrators guaranteed the cooperation necessary to complete this process. This 1990 survey provided a prototype for implementation of a system for monitoring housing situations of community mental health clients in Vermont on a routine basis.

Although the results of these three studies have been widely accepted in Vermont state government, some important questions about completeness and accuracy have been raised. First, although the surveys do provide a complete picture of adults with severe and persistent mental illness who are in treatment at community mental health centers, they provide no information on the community housing situation and needs of adults with similar conditions who are not on the roles of community mental health programs. This uncounted population may contain a disproportionate representation of elderly people, the homeless, and people with other with special needs.

Questions about the validity of both the objective and the subjective data have been raised as well. First, local case managers questioned the finding that 15% of all mentally ill clients were living in a home that they owned. As a result, case managers of all clients reported as living in homes that they owned were resurveyed. The results indicated that the original findings were correct. Due to such factors as divorce, inheritance, and purchase prior to the onset of illness, a small but significant number of clients of community programs for adults with mental illness in Vermont do in fact own their own homes.

Second, the validity of case managers' assessments of the most appropriate housing situations for their clients has been questioned. It is important to note in this context that we use the case managers' assessments as measures of staff members' attitudes, not objective housing needs. We believe that, used in this way, the measure passes the test of face validity. It is also important to note that we are not concerned in this context with the precise mechanism(s) by which public policy may have changed staff members' attitudes. One could hypothesize that new placement options, administrative pressure, staff turnover, training, and perhaps even changing client characteristics could have had an influence on any observed change. We do know that training, administrative pressure,

Actual Community Living Situation of Adults
with Severe and Persistent Mental Illness in Vermont

Actual Residence	1978		1988		1990	
	#	%	#	%	#	%
Care settings (total)	618	39%	490	29%	450	25%
Community care homes	538	34%	365	22%	339	19%
Group homes	36	2%	57	3%	65	4%
Nursing homes	44	3%	34	2%	17	1%
Other			34	2%	29	2%
Independent living (Total) ^a	962	61%	1,182	71%	1,376	75%
Subsidized rental			256	15%	469	26%
Rent/own unsubsidized			602	36%	641	35%
Family/friend			295	18%	232	13%
Other			29	2%	34	2%
Total	1,580	100%	1,672	100%	1,826	100%

Note: Statistics for care settings (total) and independent living (total) $\chi^2 = 85.6$, $df = 2$, $p < .00001$; Spearman correlation $r = .126$, $p < .00001$.

a. The 1978 survey did not collect data on specific independent living situations.

and some staff turnover did occur as part of the public policy change in this area. Finally, within this changing public policy context, the effect of repeated measures¹⁰ on case managers' responses cannot be ignored.

Findings

Our analysis of the results of the three surveys provided support for both hypotheses introduced above. Community residential patterns of adults with severe and persistent mental illness have shown a significant shift away from care settings and toward independent living. The attitudes of the staff members of community programs for these clients has shown a similar shift. In addition, the larger range of data available in the third survey provides a wealth of policy-relevant findings.

The shift in *community residential patterns* during this period was impressive and strongly supports the hypothesized movement away from more formal care settings and toward more normalized housing. Over the 12-year period in question, the number of people in care settings declined, whereas the number in independent living situations increased (Table 1). The relationship between category of living situation and year is statistically significant ($\chi^2 = 85.6$, $df = 2$, $p < .0001$; Spearman correlation $r = .126$, $p < .0001$).

The proportion of adults with severe and persistent mental illness who were living in care settings decreased significantly during this time period from 39% in 1978 to 22% in 1990. This shift away from care settings was not uniformly felt, however. The shift consisted almost entirely of a decrease in the number of people in community care homes from 34% in 1978 and to 18% in 1990. During the same 12-year period, the number of people living in nursing homes and group homes remained relatively stable.

At the same time, the number of clients who were living independently increased from 61% in 1978 to 75% in 1990. Although detailed breakdowns of independent living situations are available only from 1988 and 1990, some very interesting changes occurred over that relatively short time

TABLE 2
Recommended Community Living Situation for Adults
with Severe and Persistent Mental Illness In Vermont

Recommended Residence	1978		1988		1990	
	#	%	#	%	#	%
Care settings (total)	726	47%	521	32%	445	23%
Community care homes	423	27%	330	20%	349	18%
Group homes	222	14%	133	8%	65	3%
Nursing homes	26	2%	38	2%	27	0%
Other	55	4%	20	1%	4	0%
Independent living (total) ^a	825	53%	1,130	68%	1,470	77%
Subsidized rental			612	37%	919	48%
Rent/own unsubsidized			316	19%	467	24%
Family/friend			174	10%	81	4%
Other			28	2%	3	0%
Total	1,551	100%	1,651	100%	1,915	100%

Note: Statistics for care settings (total) and independent living (total) $\chi^2 = 217.6$, $df = 2$, $p < .00001$; Spearman correlation $r = .203$, $p < .00001$.

a. The 1978 survey did not collect data on specific independent living situations.

period. Most notably, subsidized rentals grew from 15% of the population in 1988 to 26% in 1990. During that same time period, unsubsidized rentals and house ownership remained about the same and living with family and friends actually decreased.

The *opinions of case managers* as to the most appropriate living situations for their clients changed even more substantially during this same time period and provided strong support for the hypothesis that professionals' subjective evaluations of clients' housing needs, as measured by these surveys, would change away from formal care settings and toward more diversified independent community living (Table 2). Over the 12-year period in question, the number of clients for whom care settings were recommended declined, whereas the number of clients for whom independent living was recommended increased significantly ($\chi^2 = 217.6$, $df = 2$, $p < .00001$; Spearman correlation $r = .203$, $p < .00001$).

The change in case managers' ideas about the most appropriate living situation was not confined to a single residential category. The proportion of clients for whom community care homes were thought to be appropriate decreased from 27% in 1978 to 18% in 1990. The number of people for whom group homes were thought to be appropriate decreased even more dramatically from 14% in 1978 to 3% in 1990. Only nursing homes were recommended at about the same rate in each of these studies.

Attitudes toward independent living were increasingly positive during this period. While independent living options were recorded for 53% of the clients in 1978, by 1988 that number had grown to 68% and in 1990 it was 77%. Our detailed breakdown of independent living options for 1988 and 1990 shows some substantial changes over that brief period. Clients for whom subsidized housing was recommended increased from 37% in 1988 to 48% in 1990. During that same time period, recommendations of unsubsidized rental and home ownership also increased from 19% to 24%. The only independent living options not growing in favor among case managers during this period were living with family or friends.

Beyond the purely residential information discussed so far, the availability of the *demographic and clinical data* from the more detailed 1990 survey has been very useful to policymakers in a

survey found that more than one-fourth of the clients of programs for adults with severe and persistent mental illness were described by their case managers as substance abusers. Half of the men under 35 years of age were described as substance abusers. Substance abusers were more than twice as likely as others to have been admitted to the state hospital during the year before the survey (20% vs. 8%), about twice as likely as others to require emergency overnight placement (19% vs. 11%), and substantially more likely than others to be admitted to a general hospital for psychiatric care (28% vs. 20%). The prevalence of substance abuse combined with the evidence of higher demand for the most expensive and restrictive services has helped convince policymakers to develop special services for this population.

Another important by-product of the 1990 housing survey was the collection of current data on the employment status of clients. The survey indicated that 6% of the adults with severe and persistent mental illness being served by CMH programs were holding full-time jobs and another 16% were employed part-time. For people under 35 years of age, 10% were employed full-time and another 21% were employed part-time, indicating that almost one-third (31%) of these people were employed at least part-time. Total employment for the 35-49 age group was 25%, and 16% of the people in the 50- to 64-years age group were employed at least part-time.

Finally, information on the age distribution of clients living in community care homes provided provocative if ultimately inconclusive information for an interagency committee studying the future of community care homes in the state of Vermont. The 1990 housing survey indicated that more than 43% of the clients 62 years of age and over were living in licensed community care homes, compared to 22% of the people in the 50- to 64-year age group, 13% of the 35-49-year-olds, and only 4% of the people under 35 years of age.

The unresolved questions from a planning point of view is the cause of this skewed distribution. Is this concentration of older people in community care homes due to a maturational effect or is it a generational phenomenon? A maturational effect that was purely a function of growing older would lead planners to expect large numbers of older people with mental illness to reside in community care homes in the future. If, on the other hand, the observed pattern is due to a generational effect, such predictions could be very misleading. A generational effect would be indicated if the observed pattern were the result of historical events that influenced one generation of people but was unlikely to act on future generations. In this case, a generational effect would be acting if the need for community care by older people is more a function of the disabling impact of their history of long-term hospitalization than a product of their mental illness or their age. If this were the case, the demand for community care homes for adults with severe and persistent mental illness is likely to decline in the future as the reliance on long-term hospitalization for the treatment of mental illness continues to decline.

The analysis described above evaluates the effect of a significant change in state DMH policy regarding community housing for adults with severe and persistent mental illness. During the 1980s, DMH policy shifted from a focus on congregate living in treatment settings to independent living in generic community housing. Analysis of the historical record shows a significant change in community residential patterns in the direction of the change in state mental health housing policy. The change in policy was also accompanied by a significant change in the attitudes of community mental health case managers regarding the most appropriate housing options for their clients. This attitudinal change was greater than the change in actual residential patterns, and the most recent survey shows that case managers favor further movement in the direction of state Department of Mental Health policy.

Implications for Mental Health Administrators

These three surveys and their results have proved valuable to mental health administrators in Vermont in a number of ways. First, and most pragmatically, the data produced by these surveys

Department of Mental Health and Mental Retardation to specify the precise residential patterns of its clients and the precise number of clients in need of Section 8 housing in each region of the state, for instance. At least in part because of its possession of detailed statistical information on housing situation and housing needs of its clients, the department has become a leader in advocating for affordable housing for all Vermonters. This broader involvement with community housing issues was not planned. It evolved as part of the policy development and data collection processes described above.

These surveys have also been useful, from an administrative point of view, in identifying regional differences in acceptance and implementation of DMH housing policy. The overall findings reported here were by no means uniformly distributed across the state. Some regions have changed much more rapidly than others; some regions are apparently very resistant to change. The results of these surveys have been used to identify regions of the state that apparently need more encouragement to adopt state policy. Regions that were comparatively low on their support for independent living were offered financial and technical support for developing independent living options and were put in touch with the manager of the federal Section 8 program in their region.

In addition to providing policymakers with an accurate appraisal of the current state of affairs in the service system, surveys of staff members have the added value of involving line staff members in the policy dialogue and sensitizing staff members to the importance of particular issues. Each of these three surveys informed staff members that housing policy was a major concern of state policymakers and that staff input was valued. This was particularly evident in 1990 when case managers requested a follow-up survey to establish the validity of the data regarding home ownership by community mental health clients.

The results of these studies have also led mental health policymakers in Vermont to a number of important conclusions. First, the findings have been taken as a demonstration of the feasibility and success of the state's policy that favors independent living in generic community housing for adults with severe and persistent mental illness. Second, this extensive use of independent living has been taken as evidence of a need for housing subsidies and for a flexible housing contingency funds that can support individuals during housing crises. Finally, the steady decrease in the use of the most restrictive housing options has led some to question the need for long-term care settings and congregate living options for adults with severe and persistent mental illness in the future.

Because of the value of these surveys, the authors recommend that mental health administrators seriously consider integrating routine annual monitoring of housing situation and needs in a comprehensive client database along the lines recommended by National Institute of Mental Health's Data Standards for Mental Health Decision Support Systems.¹¹ We recommend a much more detailed breakdown of community housing alternatives than is recommended by the National Institute of Mental Health. In addition, we recommend integrating housing data that describe staff members who serve these clients, and with data on patterns of service use by clients. Such a data set would provide a much richer understanding of the dynamics of public policy implementation. With appropriate feedback mechanisms, W. Edward Deming's model of continuous quality improvement¹² could be easily approximated in the field of community housing for clients of community mental health centers.

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